11.1 APPLICATION OF POLICY

The activity and use limitation (AUL) policy presented below explains the circumstances under which one or more specific AULs may or must be used to manage risks associated with a site. The policy includes an explanation of the various AULs that may be used to manage risks.

Note that Section 6.9 of this document includes a discussion of the reasons why an AUL might be used.

11.2 ACTIVITY AND USE LIMITATION POLICY FOR PETROLEUM STORAGE TANK SITES

11.2.1 Introduction

This policy has been developed, in cooperation with interested stakeholders, as an integral component of Missouri's Risk Based Corrective Action (MRBCA) guidance document. This policy was developed to ensure adequate protection of human health and the environment and to facilitate safe, cost-effective, and sustainable future land use.

[Note that the applicability of the MRBCA process to environmental emergency response incidents and sites involving imminent threats to human health or the environment is addressed at Section 1.3 of the MRBCA Process for Petroleum Storage Tanks Guidance Manual, January 2004.]

11.2.2 Definitions

- A. **Activity and Use Limitations** (AULs) are legal or physical restrictions or limitations on the use of, or access to, a site or facility to eliminate or minimize potential exposures to chemicals of concern or to prevent activities that could interfere with the effectiveness of a response action. AULs ensure maintenance of a condition of "acceptable risk" or "no significant risk" to human health and the environment.
- B. For the purposes of this policy, "reasonably anticipated future use" means "future use of a site or facility that can be predicted with a reasonably high degree of certainty given historical use, current use, development or use plans, local government planning and zoning, regional trends and community acceptance." The actual plan shall be the primary consideration in determining "reasonably anticipated future use" when there is a sufficiently high degree of certainty that the plan will be implemented.

C. A **Deed Notice** is an informational document filed in public land records (pertaining to a specific property) that alerts anyone searching the records to important information about the property. ¹

A Deed Notice shall:

- (1) Be recorded in the chain of title of the real property to which the deed notice pertains;
- (2) Be written in language a lay person can understand;
- (3) Be legally precise;
- (4) Adequately inform interested persons of the type, concentration, and location of contamination left on the property;
- (5) Adequately inform interested persons what exposure pathway is a concern:
- (6) Provide information on where the environmental data about the site is located; and
- (7) Contain a reference to, include, or describe the 'No Further Action Letter' issued by the Department and conditions contained therein.
- D. A **Restrictive Covenant** shall be a legally enforceable agreement included in the chain of title to real property that subjects all future owners to the limitations of the future use of the property. Generally, a covenant is a promise by the holder of the possessory interest in property to use or refrain from using the property in a certain manner. This covenant will run with the land.²
- E. A **tank facility** is a facility that has or had one or more petroleum storage tanks, as defined at Section 319.100 RSMo.
- F. An **underground storage tank** (**UST**) **facility** is a facility that has or had one or more petroleum underground storage tanks, as defined at Section 319.100 RSMo.
- G. A **Corrective Action Plan** (CAP) encompasses all activities necessary to manage human health and environmental risks so that they do not exceed acceptable risk levels under current and reasonably anticipated future land use conditions. CAPs might include, but not necessarily be limited to, corrective action (remediation of chemicals of concern via physical or chemical processes), activity and use limitations, and monitoring.³

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¹ US EPA, September 2000. Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups. OSWER. EPA 540-F-00-005.

² Ibid. Definition based on definition of "covenant."

³ MDNR, 2004. Missouri Risk-Based Corrective Action (MRBCA) Process for Petroleum Storage Tanks Guidance Manual. Section 10, pg. 10-1.

11.2.3 Application of Policy at Operating Tank Facilities

- A. No AUL is required at an operating UST facility where a petroleum release is cleaned up to non-residential standards.
- B. Instead of removing or remediating the chemicals of concern at an operating tank facility, the owner/operator may, as part of a CAP approved by the department, use one or more AULs listed in 11.2.4.D to mitigate a risk.

11.2.4 Application of Policy at Sites That Are No Longer Operating Tank Facilities

- A. One or more AULs may be proposed in the CAP to mitigate the risk of exposure to chemicals of concern. The AULs may be used to address current exposure pathways or exposure pathways arising from the reasonably anticipated future use of the property, as identified in the site conceptual model (SCM). The CAP is subject to the approval of the department.
- B. If the current or reasonably anticipated future use of the property is residential, the SCM identifies one or more exposure pathways to be addressed to allow for residential land use, and the CAP does not include cleanup to residential standards, one or more AULs is required.
- C. If the current or reasonably anticipated future use of the property is non-residential, the SCM identifies exposure pathways for a non-residential use, and the CAP does not include cleanup to non-residential or stricter standards, one or more AULs is required.
- D. To address the groundwater ingestion pathway, one or more of the following must be used, upon department approval, as part of the CAP:
 - (1) a deed notice;
 - (2) a restrictive covenant;
 - (3) a viable local ordinance requiring all future developments, including residences, to utilize public water supplies, or similarly minimizing the likelihood of a future private well being installed into the impacted groundwater zone;
 - (4) a substantial and reasonably durable "engineering control," such as a highway, durable commercial building, etc., that is expected to remain in place and functional for at least as long as the residual contamination poses an elevated risk through the identified pathway(s). This option will generally require notice to current and future owners by means of the AUL mechanism at D. (1) or (2) above or other means acceptable to the department;

- (5) a state regulation prohibiting installation of wells into the affected groundwater zone;
- (6) a financial assurance mechanism that will fund additional cleanup if the land is converted to residential use or used for any other purpose that will or could result in a complete groundwater ingestion pathway. This option requires notice to current and future owners by means of the AUL mechanism at D. (1) or (2) above or other means acceptable to the department;
- (7) any other method approved by the department (this assumes the owner of a specific site may propose another option as part of the CAP).
- E. To address the <u>vapor exposure pathway</u>, one or more of the following must be used, upon department approval, as part of the CAP:
 - (1) a deed notice;
 - (2) a restrictive covenant;
 - (3) a substantial and reasonably durable "engineering control," such as a highway, durable commercial building, etc, that is expected to remain in place and functional for at least as long as the residual contamination poses an elevated risk through the identified pathway(s). This option will generally require notice to current and future owners by means of the AUL mechanism at D. (1) or (2) above or other means acceptable to the department;
 - (4) a financial assurance mechanism which will fund additional cleanup if the land is converted to residential use or used for any other purpose that will result in a complete vapor exposure pathway. This option requires notice to current and future owners by means of the AUL mechanism at D. (1) or (2) above or other means acceptable to the department;
 - (5) any other method approved by the department (this assumes the owner of a specific site may propose another option as part of the CAP).
- F. To address <u>any other complete or potentially complete exposure pathway</u> that is identified as a result of current or reasonably anticipated future use in the SCM, methods similar to those listed above shall be used, subject to approval by the department during review of the CAP.